



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/265,715

03/11/1999

ASSAF GOVARI

BIO-77

4849

7590 09/24/2007
AUDLEY A. CIAMPORCERO, JR.
JOHNSON & JOHNSON
ONE JOHNSON & JOHNSON PLAZA
NEW BRUNSWICK,, NJ 089337003

EXAMINER

ROZANSKI, MICHAEL T

ART UNIT

PAPER NUMBER

3768

MAIL DATE

DELIVERY MODE

09/24/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/265,715

Applicant(s)

GOVARI, ASSAF

Examiner

Michael Rozanski

Art Unit

3768

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 12/4/03, 1/12/04, 4/19/07.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-29 have been considered but are moot in view of the new ground(s) of rejection. It is noted that the claims received on 8/20/02 are currently non-compliant because only the independent claims are listed. However, this format was compliant at the time the claims were received. In a phone interview with Louis Capezzuto on 9/6/07, the current compliant claim format was communicated and the attorney acknowledged that any response to this Office Action will be compliant (i.e. will include dependent claims).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims **1, 14, and 19** are rejected under 35 U.S.C. 102(e) as being anticipated by **Lockhart et al** (US 6,226,547):

Lockhart et al disclose a catheter 10 with a head upon which a magnetic field transducer 18 is disposed. A plurality of other transducers 19 are disposed near the

Art Unit: 3768

heart at fixed reference positions, held in place by a rigid frame (col. 3, lines 51-67).

The transducers 18, 19, which are energized to either generate a field or detect a magnetic field (col. 2, lines 36-55), are connected to a signal processor 22 that calculates the position and/or orientation of the transducer 18 by determining three position vector components and three components of angular orientation. While the invention is not concerned with the angle of rotation of the catheter head about its axis, the system is capable of determining this orientation component (col. 4, lines 50-58). In addition, the position and/or orientation of the transducer is displayed (col. 4, lines 45-49).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims **1-3 and 14-20** rejected under 35 U.S.C. 103(a) as being unpatentable over **Fabian** (US 5,057,095) in view of **Lockhart et al.**

Fabian'095 teach all the features of the instant invention including an apparatus for determining the disposition of an object relative to a reference frame having at least a field generator, which generates an electromagnetic field in a vicinity of an object, at least one transducer, which is fixed to the object which vibrates at a predetermined vibrational frequency, and emits energy, responsive to an interaction of the

Art Unit: 3768

electromagnetic field, at least one detector which detects the energy emitted by the transducer and generates signals in response thereto and a signal processor which receives and processes the detector signals to determine the coordinates of the object (col. 3, lines 64-68 and col. 4, lines 1-34).

However, Fabian do not specifically disclose determining three position vector components and three orientation components. In the same field of endeavor, Lockhart et al teach of a signal processor 22 that calculates the position and/or orientation of the transducer 18 by determining three position vector components and three components of angular orientation. While the invention is not concerned with the angle of rotation of the catheter head about its axis, the system is capable of determining this orientation component (col. 4, lines 50-58). In addition, the position and/or orientation of the transducer is displayed (col. 4, lines 45-49). It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate the teaching of Lockhart et al in order to enable determination of transducer location within the catheter's six degrees of positional freedom.

6. Claims **4-13 and 21-29** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Fabian**'095 and **Lockhart et al** in view of **Ryan** (5,727,552).

Fabian'095 and Lockhart et al teach all the features of the instant invention including attaching the resonant marker on a surgical implement. However, Fabian'095 does not teach the use of the marker specifically on a catheter to locate a catheter. In the same field of endeavor Ryan'552 teaches the use of similar type markers to locate a

Art Unit: 3768

catheter (col. 2, lines 56-67 and col. 3, lines 1-5). It would have been obvious to one skilled in the art at the time that the invention was made to have used the marker as taught by Fabian'095 in the catheter as taught by Ryan'552 in order to be able to localize the catheter via use of a similar type marker. The use of multiple markers would have been an obvious modification to skilled artisans in order to use techniques such as triangulation, which are well within the knowledge of skilled artisans in order to localize and determine the orientation of a catheter of interest.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 3768

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Rozanski whose telephone number is 571-272-1648. The examiner can normally be reached on Monday - Friday, 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eleni Mantis-Mercader can be reached on 571-272-4740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MR

MR

Eleni Mantis-Mercader
ELENI MANTIS MERCADER
SUPERVISORY PATENT EXAMINER